## ICAR-CENTRAL INSTITUTE OF AGRICULTURAL ENGINEERING : BHOPAL



Centre of Excellence for Soybean Processing and Utilization (CESPU) ICAR-Central Institute of Agricultural Engineering, Bhopal- 462038

An awareness program titled "Soy for Food Uses and its Role in Entrepreneurship Development" was organized on 5th September 2024 by the AFSTI-Bhopal Chapter in collaboration with the Agri-Business Incubation Centre of ICAR-Central Institute of Agricultural Engineering (CIAE), Bhopal. The event was attended by 30 students, including both undergraduate and postgraduate students, as well as faculty members from the Food Technology and



Nutrition Department of Government Geetanjali College and Sant Hirdaram College, Bhopal. The program was hosted at the Centre for Excellence on Soybean Processing and Utilisation (CESPU), with the primary aim of creating awareness about soybeans' potential in food applications and fostering entrepreneurship in agribusiness.

This workshop was held as part of the National Nutrition Week 2024 with the theme **Nutritious Diets** for Everyone. The initiative sought to highlight the critical role of nutrition in public health and to inspire students to innovate in the field of food technology. It specifically encouraged the development of agribusiness ventures, helping students transform their innovative ideas into successful commercial enterprises.

Dr. Dipika Agrahar Murugkar, President of the AFSTI-Bhopal Chapter, warmly welcomed the students and faculty, introducing them to the importance of Nutrition Week and the role of AFSTI in promoting food science and technology in India. She emphasized the organization's dedication to nurturing young talent and fostering the growth of the food industry. In her speech, she underscored how such initiatives contribute not only to the development of nutritious food products but also to entrepreneurial ventures, supporting the local economy and improving public health outcomes.

Dr. KVR Rao, PI ABI-NAIF and Head IDED, ICAR-CIAE, provided a comprehensive overview of the incubation programs and technologies being developed at the institute. He assured the students of the institute's openness to support their innovative ideas, offering access to the technologies under incubation. He also encouraged the students to explore the wealth of resources available at ICAR-CIAE for nurturing their ideas into feasible agribusiness ventures.

Dr. Nita Khandekar, the In-charge of CESPU, delivered an insightful talk on the importance of soybean as a vital food crop, elaborating on the work being conducted at the Centre for Excellence in Soybean Processing and Utilisation. She also touched on how CESPU plays a pivotal role in translating scientific knowledge into practical applications in the soy-based food industry.

The key highlight of the workshop was an expert lecture delivered by Dr. Punit Chandra, Retired Principal Scientist, who shared his extensive knowledge on the processing, nutritional quality, and health benefits of soybean. In his talk, Dr. Chandra discussed the versatility of soy in food processing, its role in improving food security, and its potential to address malnutrition. He emphasized how soy's rich content of high-quality protein, essential fatty acids, and bioactive compounds such as isoflavones make it a powerful food source with numerous health benefits. Additionally, Dr. Chandra spoke about the industrial processing techniques for soy products, including soy flour, soy protein isolates, soymilk, and tofu, highlighting the technological advancements that have made these products widely available and affordable.

Following the lecture, participants were given a practical demonstration of the soybean processing techniques at the pilot plant level. This demonstration showcased the step-bystep process of producing soymilk and tofu, two popular soybased products. The session provided students with a hands-on learning experience, illustrating the process from raw soybean



to final product, including steps



such as soaking, grinding, filtration, and coagulation. The importance of maintaining food safety, hygiene, and quality control during the production process was also highlighted. Participants were shown how soymilk, a nutritious dairy alternative, can be produced with minimal equipment and investment, making it a viable option for small-scale entrepreneurs. They also observed the tofu-

making process, learning about its texture, flavoring, and storage techniques, which are crucial for extending shelf life and improving marketability.



This combination of theoretical knowledge and practical application aimed to equip students with a well-rounded understanding of sovbean processing and its entrepreneurial potential. The workshop concluded with an interactive session. where students engaged with the

experts, asking questions about the technical and business aspects of soybean processing, and discussing possible avenues for agribusiness startups.